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Enhancing Diversity in the Nursing Workforce:
An Evaluation of Multicare's Nurse Pipeline Program

McKenzie Golden, RN

A DNP project submitted in partial fulfillment
of the requirements for the degree of

Doctor of Nursing Practice

Seattle University
2022

Approved by: *Kumhee Ro DNP*
DNP Faculty Mentor: Kumhee Ro, DNP, ARNP, FNP-BC

Date: 6/7/2022

Approved by: *Danuta Wojnar*
DNP Project Reader: Danuta Wojnar, PhD, RN, MED, IBCLC, FAAN

Date: 6/8/2022

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Abstract

Associations exist between poor racial/ethnic representation in the healthcare workforce and lower quality of care, increased disability and mortality in communities of color (Jones et al., 2021; The Sullivan Commission 2004). Research supports that pipeline programs introducing underrepresented students to careers in nursing and allied health are effective at increasing diversity in nursing, student self-efficacy and influence them toward such careers in healthcare (Butler & Ampadu, 2020; Crews et al., 2020; Mei et al., 2022). This study is a program evaluation utilizing a descriptive mixed methods survey to assess the influence of Multicare's nurse camp on alumni from the 2016-2020 cohorts. 489 eligible alumni were sent a 30 item Qualtrics survey collecting demographic data, career data, self-efficacy scores utilizing Chen et al.'s (2001) New General Self-Efficacy scale and short answer questions collecting qualitative data on program influence and barriers to careers in nursing for underrepresented students. 111 responses were received with 88% of all respondents reporting intent to pursue careers in nursing or healthcare. The mean self-efficacy scores for all alumni was 35.82/40 signifying high self-efficacy. Job shadowing and hands-on skills were the most influential experiences from camp. Barriers to pursuing nursing include challenging college applications, financial constraints and changes to the educational landscape due to the COVID-19 pandemic. Multicare's nurse camp is effective at recruiting underrepresented students and influencing them towards careers in nursing

Keywords: nursing recruitment, nurse pipeline, barriers to nursing, diversity in nursing, high school nurse pipeline

Enhancing diversity in the nursing workforce: An evaluation of Multicare's nurse pipeline program

The United States is in a health care provision crisis. Rural and racial/ethnic populations are experiencing the brunt of health disparities and inequities, a pattern that has only worsened over the past several decades. Our health system has failed to keep pace with changing the demographics in our nation (National Academies of Sciences, Engineering and Medicine, 2021). As a result, Black, Indigenous and people of color (BIPOC) are grossly underrepresented in health care professions causing a diversity gap that has perpetuated health disparities for these populations (The Sullivan Commission, 2004). According to the U.S. Census Bureau, racial and ethnic minorities make up 38% of the population, but only 19.2% of the nursing workforce (AACN, 2019; Jones et al., 2021). Correlations have been made between poor BIPOC representation in health care, lower quality of care and increased rates of illness, disability and premature death in communities of color (National Academies of Sciences, Engineering and Medicine, 2021; The Sullivan Commission, 2004). Pipeline programs have been cited as such a solution to increase minority recruitment into health care (Dawkins, 2021; Katz et al., 2016; Area Health Education Centers, 2021). The main goal of these programs is to pique interest in nursing and increase participant self-efficacy to pursue a career in health care, particularly for underrepresented students (Mei et al., 2022; Johnson et al., 2020). Pipelines have existed and operated for decades, however, not all programs are represented in nursing literature regarding their characteristics, efficacy of recruiting underrepresented students and influence in guiding students toward a career in nursing.

Background and Significance

Historic Context

The United States healthcare system has been plagued by staffing shortages and a lack of racial/ethnic diversity for decades. As early as 1970, the Carnegie Commission on Higher Education sounded the alarm to highlight the increasing barriers to higher education and the persistent segregation in these institutions, thus projecting staffing shortages in the healthcare workforce as a result of these challenges (Carnegie Commission, 1970). The commission's report called for the development of 'Educational Opportunity Centers,' that serve a "counseling and recruiting function" to engage students and parents in an effort to aid in healthcare career pursuits (Carnegie Commission, 1970). From this, it is presumed that institutions and communities began to develop programs to address the diversity gap and improve recruitment into health care professions. Area Health Education Centers (AHECs) then formed as a result and became the are federally funded pipeline programs that stand to this day. Currently there are over 300 AHECs in the United States. It is understood that, "the national AHEC program has been a successful catalyst for forming educational links between health science centers and communities," serving as an example for future pipeline efforts (Area Health Education Centers, 2021).

Several decades later, in 2004, the report titled *Missing persons: minorities in the health professions* published by the Sullivan Commission expanded upon previous calls to action for healthcare staffing shortages by highlighting the absence of racial/ethnic minorities in the healthcare workforce (The Sullivan Commission, 2004). This report serves as a keystone to increase diversity in nursing and allied health careers, establishing that correlations exist between poor BIPOC representation in healthcare and poorer health outcomes for communities of color

(The Sullivan Commission, 2004). The lack of diversity in healthcare is a grave issue that has been documented for decades, perpetuating inequities in social determinants of health, which will be further explored after establishing the current demographic makeup of the United States and nursing profession (Altman et al., 2016).

According to the 2020 U.S. Census reports, the demographic makeup of the United States is changing considerably. Although the non-Hispanic White population remained the predominant racial/ethnic group in the U.S., this population has decreased by 8.6% since 2010 (Jones et al., 2021). The multiracial population increased by 276% from 2010, the largest percent change observed in the 2020 census results (Jones et al., 2021). In 2020, 61.6% of the population were non-Hispanic White individuals, 12.4% of individuals were Black/African American, 18.7% were of Hispanic/Latinx origin, 6% of the population were Asian and 1.1% of the population American Indian or Alaska Native (Jones et al., 2021).

This is compared to the demographic makeup of nursing, in which the report *The future of nursing 2020-2030* by the National Academies of Sciences, Engineering and Medicine (2021) states that of the 3.35 million full time nurses in 2018, 69% identify as non-Hispanic White, 12% as Black/African American, 9.1% as Asian, 7.4% as Hispanic/Latinx and 2.5% as Other. Compared to the demographic makeup of the nursing workforce two decades prior, there has been a notable increase in BIPOC representation in the nursing workforce; however, increasing workforce diversity is still lagging behind national demographic changes with BIPOC communities projected to makeup greater than 50% of the U.S. population by 2040, thus widening the chasm of BIPOC underrepresentation in healthcare (Jones et al., 2021; National Academies of Sciences, Engineering and Medicine, 2021). With the increasing gap in representation of BIPOC communities in the healthcare workforce, health disparities are only

projected to worsen if not addressed (National Academies of Sciences, Engineering and Medicine, 2021).

Health Disparities in BIPOC Communities

Communities of color disproportionately experience negative health outcomes due to inequities in social determinants of health (National Academies of Sciences, Engineering and Medicine, 2021; Baciu et al., 2017). Social determinants of health (SDH) refers to non-medical factors such as housing, economic stability, geographic location, education, food access and more that impact one's health (World Health Organization, 2022). Studies show that SDH can account for 30-35% of health outcomes and could be more influential than health care or even lifestyle to one's overall health (World Health Organization 2022). Examples of inequities in SDH from the COVID-19 pandemic show that Black/African Americans, Hispanic/Latinx Americans and American Indians/Alaskan Natives were disproportionately affected by the pandemic, even resulting in increased mortality for Black/African Americans (Cuellar et al., 2020). Additionally, in the U.S., Pregnant Black/African American individuals are 4-5x more likely to die in childbirth or from pregnancy complications than White women (U.S. Department of Health and Human Services, 2018). Hispanic American children are 40% more likely to die from asthma than non-Hispanic White children (U.S. Department of Health and Human Services, 2018). These are simply several salient statistics of health disparities that disproportionately affect BIPOC communities due to inequities in SDH experienced by these communities as a result of systemic racism.

Increasing BIPOC Representation in Healthcare

To address these inequities, increasing BIPOC representation in healthcare is one piece of the puzzle. Greater representation in healthcare can not only address structural racism that

impacts health, but also provide economic and job stability that can help improve SDH of specific individuals and families (Swartz et al., 2019; National Academies of Sciences, Engineering and Medicine, 2021). The National Coalition of Ethnic Minority Nurses Association (2022) affirm that increasing BIPOC representation in nursing will have downstream systemic effects, such as prioritizing specific minority initiatives like accessible, equitable and culturally appropriate care for communities of color. Swartz et al. (2019) also assert that by diversifying clinical teams, our health systems can be better equipped to address disparities in health outcomes for communities of color. This is likely because diverse clinical teams, “are interested in examining the role that nonscientific factors have in health and wellbeing, such as adverse social determinants of health” (Swartz et al., 2019). A diverse, as opposed to a homogenous, workforce can incite innovation, novel research and improved problem solving to address growing health disparities. One strategy to increasing BIPOC recruitment and representation that is supported by literature is pipeline programs tailored to introducing underrepresented students to careers in healthcare.

Literature Review

Twelve studies were included in this literature review sourced via PubMed. Search terms included ‘pipeline program self-efficacy,’ ‘healthcare pipeline program diversity,’ and ‘youth perceptions of nursing as a profession.’ Articles pertaining specifically to high school to nursing pipeline programs were given preference with additional consideration to literature outlining other healthcare pipeline programs in medicine, pharmacy and biomedical sciences.

Pipeline Recruitment Efficacy

Navigating the educational pipeline for students of color can be challenging, particularly if students have not received prior home or educational support and lack access to

extracurriculars or career coaching (Abdulrazzak et al., 2021; Crews et al., 2020; Swartz et al., 2019). Literature supports that pipeline programs exposing underrepresented students to careers in healthcare are successful in recruiting BIPOC students into healthcare programs (Butler & Ampadu, 2022; Crews et al., 2020) Crews et al. (2020) showcased Johns Hopkins' pipeline initiative for Baltimore-native high school students that aims to pair underprivileged students with mentors in the STEM fields. They found that 83% of program alumni matriculated into post-secondary programs with 73% of those choosing a STEM major (Crews et al., 2020). Similarly, Southern Illinois University-Edmondsville's (SIUE) Healthcare Diversity Summer Camp surveyed 70 past alumni with 68 reporting current pursuit of a healthcare degree (Butler & Ampadu, 2022). Programs such as Johns Hopkins pipeline initiative and SIUE's summer camp that are tailored to underrepresented student's needs have shown to be successful at piquing student interest in healthcare careers and these are simply two examples of the many programs functioning throughout the U. S. Reaching students of color at a young age to empower and influence them towards careers in healthcare is an important part to addressing health disparities that can improve the health of BIPOC communities.

Changing Perceptions of Nursing as Profession

Pipeline programs show positive impact on student's future career pursuits (Butler & Ampadu, 2022; Crews et al., 2020; Johnson et al., 2020; Katz et al., 2016; Norris et al., 2016). Katz et al. (2016) concluded that "student's views about college and nursing can be changed with pipeline programs," after conducting a pre and post survey showing Hispanic students' changes in perception of nursing due to their camp experience. This is an important function of pipeline programs, as nursing is often misunderstood and misrepresented in media leading to confusion and misconceptions about the career. In an integrative literature review, Glerean et al. (2017)

found that adolescents viewed nurses enduring “poor working conditions” with “limited autonomy and [roles] inferior to doctors’.” Adolescents viewed nursing as caring and hardworking, but less intellectual as most respondents did not realize the educational requirements of becoming a nurse (Glerean et al., 2017). Pipeline programs are well positioned to provide a window into the work of a nurse and address common misconceptions that may deter youth from considering such a career path.

Pipeline Influence on Self-Efficacy

Self-efficacy is influenced by many factors throughout one's life; however, literature supports that pipeline programs have a degree of influence on student development of career self-efficacy (Butler & Ampadu, 2022; Johnson et al., 2020; Mei et al., 2022; Yelorda et al., 2021). Pipelines are programs specifically intended to provide education and career support to BIPOC and underprivileged students who may face barriers to entry into healthcare professions. These programs are usually affiliated with either a healthcare organization or a post-secondary college/university. They usually include a component of job shadowing, introduction to hands-on skills, test preparation and other didactic sessions intended to show underrepresented students they can be successful and integral to the healthcare system. A hallmark of pipeline programs is to provide positive student experiences in healthcare professions and prepare students for the academic rigors ahead (Wesley-Schultz et al., 2012).

Perhaps more influential than changed perceptions of nursing as a profession, pipeline programs also positively influence one's self-efficacy, defined as the intrinsic belief in oneself to carry out personal or professional goals despite potential difficulties along the way (Mei et al., 2022; Yelorda et al., 2021). Self-efficacy is an important characteristic in developing resilience, which serves as a strong predictor for professional achievement (Mei et al., 2022). Furthermore,

in studying professional identity development in freshman nursing students, Mei et al. (2022) concluded that “students [who] learn to identify, enhance, and/or develop protective factors... will be better equipped to manage perceived adversity and stress. Cultivating resilience among students may help with academic success.” Johnson et al. (2020) found through the SPIN program (Summer Professional Immersion in Nursing) that participant’s self-efficacy was positively influenced upon camp completion when compared to pre-camp levels. This study also concluded, that because of this positive impact on self-efficacy, there will be a greater impact on underrepresented student enrollment into nursing as a result (Johnson et al., 2020). This is a main objective for healthcare pipelines, Multicare’s nurse camp included.

Program Description

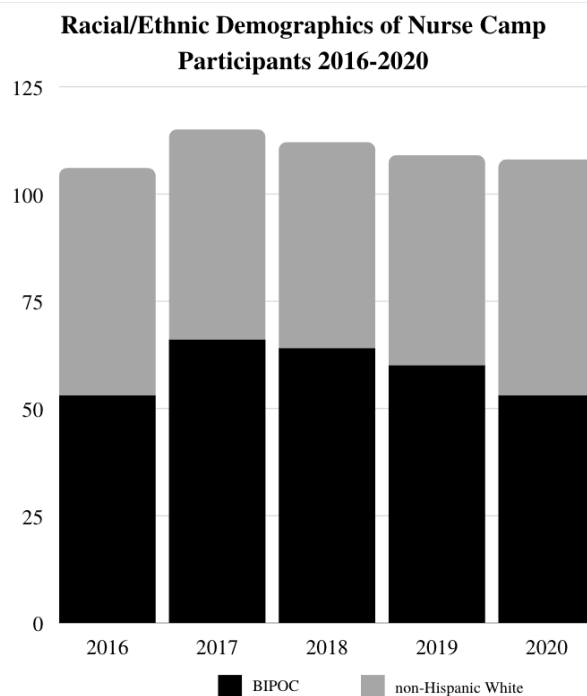
Multicare is a large non-profit healthcare system serving south Puget Sound Washington. Nurse camp is hosted by Multicare’s Center for Health Equity and Wellness that holds a mutual goal of diversifying the nurse workforce and addressing racial inequities in healthcare. The camp has operated out of Tacoma General Hospital for one week every summer since 2004. With the exception of camp in 2020 that was held in an alternative, virtual format, camp takes place onsite at Tacoma General with job shadow opportunities at neighboring Multicare hospitals.

Nurse camp is a pipeline program aimed at introducing BIPOC, first generation and low socioeconomic high school students to nursing and healthcare professions. Sophomore, junior and senior class high school students located in Pierce, King, Kitsap and Thurston counties in Washington state are eligible to apply to the program. The application process includes completing an online form providing demographics and contact information as well as a short personal essay on student interest in the profession. Each year there are between 100-120 participants per cohort. Throughout the week of camp, students partake in didactic sessions,

simulation, job shadowing, hands-on skills and attend several panels to hear from practicing nurses and local college admissions counselors with the intention to spark interest in nursing and allied health careers, while guiding students on steps to achieving this goal.

During the period of interest in this study from 2016-2020, over 50% of all participants identified as BIPOC [see Figure 1].

Figure 1
Self-reported Racial/Ethnic Identity of Nurse Camp Participants from 2016-2020



Note. BIPOC represents Black/African American, Hispanic/Latinx, Asian, Pacific Islander/Native Hawaiian, American Indian/Alaskan Native and Mixed Race individuals

In regards to gender identity, 9% of all attendees from 2016-2020 identified as male and 91% of attendees identified as female. Considering socioeconomic status, nurse camp participants were determined to be of low socioeconomic status if they qualified for free or reduced lunch fare in high school. Qualification for free and reduced lunch fare is determined from gross household income at or below the determined poverty line per state. Of the 550

participants between 2016-2020, 128 students qualified for free and reduced lunch resulting in 23.3% of all participants coming from a low socioeconomic background.

Project Purpose

The purpose of this project is to evaluate Multicare's nurse pipeline program that operates as a summer camp to gather data on specific stakeholder interests for the purpose of program quality improvement. The following aims developed with stakeholders will be explored in the survey: 1) collect data on the percent of nurse camp alumni, with particular emphasis on BIPOC alumni, who are pursuing nursing and allied health careers and barriers to pursuing said careers, 2) collect data on how many alumni have achieved a CNA, LPN or RN licensure, 3) assess program influence on alumni self-efficacy and 4) assess influential and missing program characteristics for program improvement. All survey queries will be analyzed with particular emphasis on the experiences of underrepresented students, as defined by BIPOC, first generation students and individuals from low socioeconomic backgrounds.

Theoretical Framework

Two theoretical frameworks were employed to guide this project. To perform the program evaluation, the Center for Disease Control's (CDC) framework for program evaluation in public health (1999) was utilized. Bandura's theory of self-efficacy (1977) was used to explain the effect of nurse camp experiences and its influence on career outcomes.

The CDC's framework for program evaluation in public health (1999) serves as scaffolding to perform program evaluations. Although it was designed for use in public health, it's a practice framework that is general enough to apply in many settings. This framework provides steps in performing the program evaluation, as well as, standards to uphold the integrity of the evaluation [see Figure 2]. The framework "emphasizes six particular steps that together

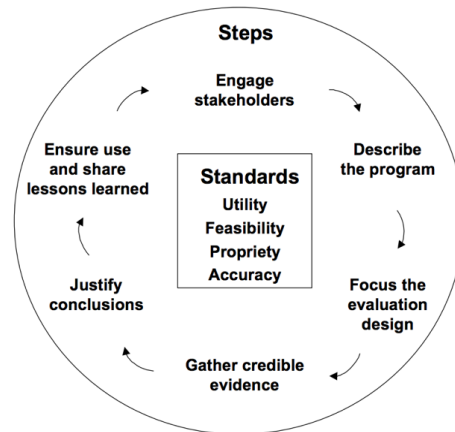
can be a starting point to tailor an evaluation for a particular effort, at a particular point in time” (Center for Disease Control, 1999).

Figure 2

Elements of the CDC’s framework for program evaluation in public health, 1999

Overview of the Framework for Program Evaluation

ELEMENTS OF THE FRAMEWORK

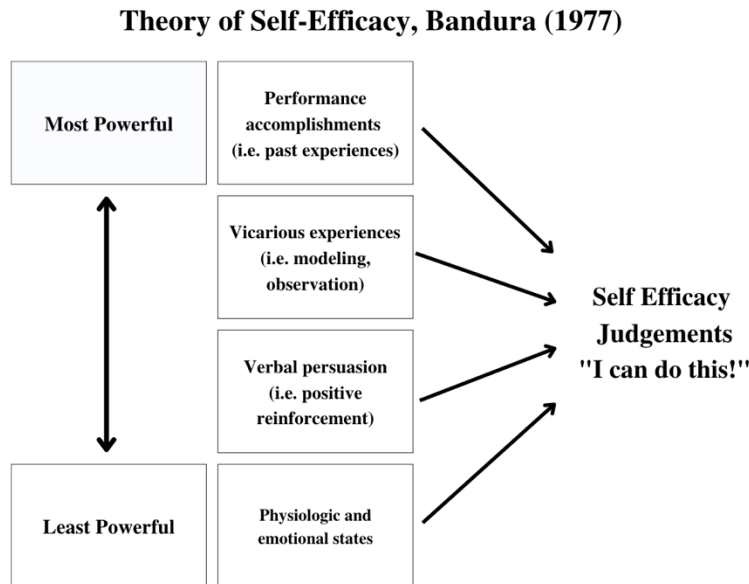


The four standards to ensure an effective evaluation are utility, feasibility, propriety and accuracy. This means the evaluation must serve the needs of the stakeholders, be realistic, be performed in an ethical manner and results must be conveyed in an accurate manner. This framework for program evaluation is determined to be the most suitable to address the needs expressed by the principal stakeholders at Multicare since the aims of our evaluation are very specific.

Beyond utilizing a framework for performing the program evaluation, the theory of self-efficacy will help describe how experiences at nurse camp serve as sources of influence for participants to achieve career aspirations. Self-efficacy is described as the “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1999). Self-efficacy at a basic level describes personal agency. High self-efficacy has been linked with increased motivation, resilience and educational achievement (Bandura, 1982).

Self-efficacy theory “suggests that it is the responsibility of society to provide everyone with sufficient opportunities to engage in mastery experiences, receive positive social persuasion and witness positively reinforcing models that will engender a strong sense of self-efficacy” (Gallahger, 2012). Given this suggestion, it is deemed an appropriate theory to apply to the nurse camp program evaluation given one of the main aims is to provide the community with opportunities to cultivate positive experiences with careers in healthcare. Figure 3 illustrates the influence of different types of experiences leading to positive self-efficacy judgements.

Figure 3
Sources of self-efficacy influences



According to the theory of self-efficacy, performance accomplishments described as past experiences, and vicarious experiences such as observation and shadowing, are among the most powerful inputs that aid in increased self-efficacy (Bandura, 1977). This is applicable to our program evaluation given these types of experiences are emphasized at Multicare’s nurse camp. Self-efficacy theory is a well-established, empirically based theory that,

“proposes a more measured worldview in which opportunities to experience or witness success may promote positive evaluations of one’s capabilities to succeed in the future, which in turn increases the likelihood of subsequent positive outcomes” (Gallagher, 2012).

Given nurse camp’s aim to positively influence participants toward careers in nursing and allied health by providing hands-on experience in the field, the theory of self-efficacy is a relevant framework for explaining the modes of influence students experience during their time at camp. By evaluating alumni career outcomes, we can begin to make sense of the influence of nurse camp experiences in the context of Bandura’s (1977) theory of self-efficacy.

Methodology

Institutional Review Board

This project was deemed non-human subjects research and thus granted IRB exemption by Seattle University’s IRB. This study did not meet qualifications for Multicare IRB review as it was deemed a quality improvement project by Multicare’s Center for Health Equity and Wellness.

Design

This program evaluation utilizes mixed methods by collecting quantitative and qualitative survey data to evaluate the influence of Multicare’s nurse camp. This survey has four distinct portions of data collection: demographics, career/education data, self-efficacy scale and short answer questions to assess program influence and barriers to healthcare careers.

Setting

The intervention that took place is a self-paced online Qualtrics survey sent to Multicare nurse camp alumni from 2016-2020. Multicare is a large non-profit healthcare organization in which the Center for Health Equity and Wellness department hosts the annual nurse camp that is

available to high schoolers from King, Pierce, Kitsap and Thurston counties in Washington state. All nurse camp alumni attended high schools within these county lines.

Recruitment and Participants

Inclusion criteria for this study is full participation in at least one nurse camp from 2016-2020. Individuals who did not attend nurse camp in its entirety will be excluded. Recruitment will be purposive and performed by emailing qualifying alumni utilizing emails from datasets provided by Multicare. Using purposive sampling, the survey was sent to a total of 550 nurse camp alumni; however, 61 emails were unable to be received presumably for out of data contact information. 489 nurse camp alumni were confirmed to have received the survey. Prior to beginning the survey, alumni received an email explaining the voluntary nature of the study [Appendix A]. Participants were also informed that they may choose to skip certain questions or withdraw survey answers from the study at any time. Participants were notified that completion of the survey served as consent to use their responses anonymously.

Data Collection

A 30 item Qualtrics survey was emailed to 489 nurse camp alumni. The survey was emailed weekly for one month and included multiple choice, short answer and 5 point Likert scaled items.

The survey is divided into four portions. The first portion is collecting demographic data including gender identity, Hispanic/Latinx origin, race/ethnicity, first generation student status and languages other than English spoken at home. This information is intended to capture the diversity of underrepresented students that attend nurse camp.

The second portion of the survey is to gather actual and/or intended career and employment data for nurse camp alumni. This will request respondents to report current CNA,

LPN or RN licensure, university and program enrollment and current employment in health care. This data is to measure the amount of respondent's that have pursued nursing or health care related careers after involvement in nurse camp.

The third part of the survey has five point Likert scaled items ranging from strongly disagree to strongly agree to look at minority representation at nurse camp, financial preparedness for post-high school education and measuring nurse camp influence on self-efficacy by using Chen et al.'s (2001) validated New General Self Efficacy Scale (NGSES) [Appendix C]. The intention of this survey portion is to measure nurse camp's influence on participant's self-efficacy to pursue nursing as a career.

The last portion of the survey is four short answer questions asking respondents to identify barriers to pursuing nursing as a career, nurse camp influence on pursuing nursing and program characteristics that were impactful for participants or that were missing for participants. The information gathered in this portion of the survey will be beneficial for future program development and quality improvement to inform program activities and address barriers to pursuing careers in health care for participants.

Participants were informed that the survey would take approximately 10 minutes to complete. They had four weeks total to complete the survey with reminders sent to non-respondents at the second and third week mark. The survey closed officially on Sunday, March 6th, 2022 at 11:59PM. After a respondent has completed a survey they received a follow up thank you email to acknowledge their contribution.

Measures and Instruments

Demographic data was collected with questions modeled after the wording used U.S. census surveys in regards to gender orientation and race/ethnicity. Short answer questions have

been created in tandem with key project stakeholders to gather beneficial information for the aims outlined prior according to their needs, 1) collect data on the percent of nurse camp alumni, with particular emphasis on BIPOC alumni, who are pursuing nursing and allied health careers and barriers to pursuing said careers, 2) collect data on how many alumni have achieved a CNA, LPN or RN licensure, 3) assess program influence on alumni self-efficacy and 4) assess influential and missing program characteristics for program improvement.

Chen et al.'s (2001) NGSES will be utilized to measure self-efficacy scores of nurse camp alumni. Dr. Elaine Walsh was consulted to address maintaining validated tool integrity while providing context to why the tool is being used. Prior to presenting this scale to respondents, she suggested a clause to preface this portion of the survey by asking participants to "please consider the influence of nurse camp on the following statements." The intent is to measure nurse camp influence on alumni's development of self-efficacy in pursuing nursing as a career. Since the NGSES is a validated tool, its integrity and verbatim wording has been maintained and utilized in this survey. The NGSES was adapted from Sherer et al.'s (1982) Standard General Self-Efficacy Scale (SCSE scale) to eliminate redundancies and shorten the length from 17 items to 8 items. It maintains the original 5 item Likert scale ranging from strongly disagree to strongly agree (1 = strongly disagree, 2 = somewhat disagree, 3 = neither disagree nor agree, 4 = somewhat agree and 5 = strongly agree). After rigorous testing, the NGSE scale "demonstrated high reliability [and] predicted specific self-efficacy for a variety of tasks in various contexts" (Chen et al., 2001). Additionally, "the NGSES consistently yielded appreciably higher content validity and somewhat higher predictive validity compared to the SCSE scale" (Chen et al., 2001). The validity and reliability of the NGSES along with its brevity is why it has been chosen for this study.

Data Analysis

Data analysis was performed on the quantitative and qualitative data collected. A triangulation design to cross validate findings among qualitative and quantitative results was utilized by comparing themes found in short answer questions with career data and Likert scaled items (Center for Disease Control, 1999). Descriptive statistics is the main form of data analysis utilized to report the data collected on discrete variables and results from binary yes/no questions. Ratios and frequencies of survey responses were reported for the group of respondents as a whole, then for subgroups of BIPOC respondents for items that were appropriate for this distinction. Thematic analysis of qualitative data was performed with extracting supporting quotes. Qualitative data corroborating Likert scaled items and the NGSES was also utilized to further support findings.

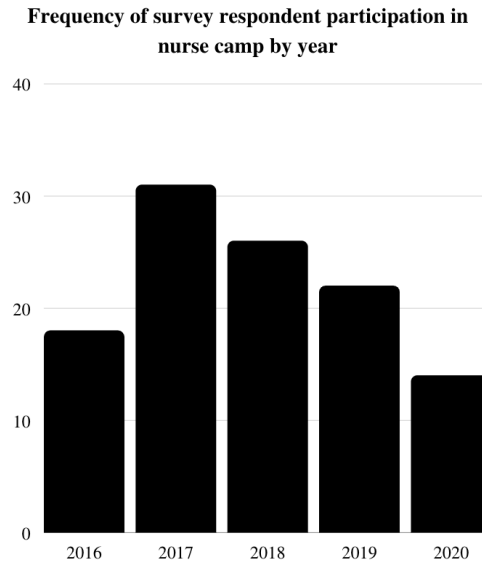
Results

Demographics

Although there was a total of 550 participants in nurse camp from 2016-2020, the Qualtrics survey was ultimately sent to a total of 489 nurse camp alumni as 61 emails were not received presumably due to out of date contact information or disabled emails. Given that 111 responses were received out of the total 489 emails sent, the survey response rate is 22.7%. The distribution of respondents by year who participated in nurse camp are represented in Figure 4. The distribution of survey respondents was distributed relatively evenly with each cohort response rate greater than 10% [see Figure 4].

Figure 4

Frequency of survey respondent participation in nurse camp by year



Nurse camp alumni were surveyed for various demographic characteristics including gender orientation, race and ethnicity, first generation status and language other than English spoken at home [see Table 1].

Table 1

Frequency and percent of surveyed alumni sociodemographic characteristics

	Frequency	Percent
Gender		
Female	98	88.3%
Male	12	10.8%
Nonbinary	1	0.9%
Ethnicity		
Hispanic or Latinx	17	15.3%
Non-Hispanic	94	84.7%
Race		
Asian	25	22.5%
American Indian or Alaskan	0	0.0%
Native		
Black or African American	12	10.0%
Pacific Islander or Native	1	0.8%
Hawaiian		
White	64	61.7%
Other	8	7.2%

First Generation Student		
Yes	32	29.1%
No	78	70.9%
Language other than English spoken at home		
Yes	23	20.7%
No	88	79.3%

The majority of survey respondents were non-Hispanic White alumni. BIPOC respondents accounted for 47.7% of all responses. Language diversity of respondents was also explored and 20.7% (n=23) of alumni respondents reported they speak a language other than English at home. Languages spoken at home by nurse camp alumni include: Spanish, Vietnamese, Tagalog, Korean, Punjabi, Mandarin, Cantonese.

Career Data

A majority of alumni respondents report intention to pursue a career in nursing or allied health after experiencing nurse camp. Of the alumni respondents, 88.2% (n=97), report goals to pursue a career in health care. Notably, 94.5% (n=52) of all BIPOC respondents confirmed that they intend to pursue a career in nursing or health care.

Career data regarding current enrollment in a post-secondary nursing or allied health program showed that 54.6% (n=60) of respondents report current enrollment. Of the respondents that report current enrollment, 41.7% (n=25) identify as BIPOC individuals. Of the respondents who are currently enrolled in a post-secondary health care program, the majority, 71.6% (n=43), are currently enrolled in a nursing program. Other majors reported by respondents include: pre-medicine (n=6), public health (n=2), EMT (n=2), diagnostic ultrasound (n=1), dietetics (n=1), healthcare leadership (n=1), kinesiology (n=1), psychology (n=1) and pharmacy (n=1).

Despite the majority of respondents reporting current enrollment in post-secondary health care careers and/or intention to pursue these careers, fewer respondents report holding a current

nursing related license or current employment in health care. Of all respondents, 34.6% (n=38), report holding a CNA, LPN or RN license. Of those holding a current nursing related license, the majority of respondents, 78.9% (n=30), state they hold a CNA license. Similarly, a minority of respondents report current employment in healthcare. 35.5% (n=39) of respondents confirm current employment in healthcare and report a range of jobs including: registered nurse, nurse aid, pharmacy assistant, medical assistant, phlebotomist and EMT. Fewer alumni respondents report achieving current nursing licensure and/or employment likely given the current age of nurse camp alumni, which will be discussed further.

Self-Efficacy

Utilizing the New General Self-Efficacy scale, respondent scores indicate high self-efficacy. Prior to completing the NGSES, respondents were prompted to specifically consider nurse camp's influence on each of the 8 NGSES items. Per the scoring of the NGSES, any score greater than 30 out of 40 total points indicates a high level of self-efficacy. The mean NGSES score for all alumni respondents was 35.82 out of a total 40 points, indicating alumni respondents exhibit high self-efficacy.

Qualitative data corroborates high self-efficacy scores. Alumni reported that nurse camp “[gave them] confidence that [being a nurse] is achievable.” Another respondent also stated that they “remember leaving nurse camp everyday feeling excited and empowered.” In response to influential camp experiences, a respondent also stated that “hearing from other career professionals definitely helped [them] build confidence in [themselves] and [their] ability to pursue a career in healthcare.” Statements from alumni expressing increased confidence and empowerment from nurse camp experiences further support findings of high self-efficacy among nurse camp alumni.

Program Influence

Alumni respondents were asked ‘what specifically about nurse camp influenced you to pursuing a career in nursing or allied health?’ When asked about influential camp experiences, emergent themes from nurse camp alumni proclaim job shadowing, introduction to hands-on skills and exposure to a variety of nursing as the most memorable encounters. Salient themes with associated respondent quotes regarding camp influence are shown in Table 2.

Table 2

What specifically about nurse camp influenced you to pursue a career in nursing or allied health?

Job shadowing	<p>“The thing that helped me determine that I wanted to be a nurse during nurse camp was getting to job shadow a nurse in the ER.”</p> <p>“[Nurse camp] allowed me to shadow a nurse and see the day to day life of a nurse, which made me sure of what I wanted to go to college for.”</p> <p>“Being able to job shadow nurses in the hospital was the most valuable part of the nurse camp program. Seeing what [nurses] really do before entering the career of nursing is really helpful.”</p> <p>“Shadowing nurses was the most amazing part of nurse camp. I remember it so vividly, and really loved being given the one-on-one opportunity with nurses.”</p>
Experiencing a variety of nursing careers/specialties	<p>“Seeing a variety of nursing rather than just one thing.”</p> <p>“Before nurse camp, I was mainly looking into careers in physical therapy, but nurse camp swayed me and I saw how wide and diverse a career in nursing can offer and how many opportunities are available in the field.”</p> <p>“The ability to see several different pathways in the nursing career and how much you can do with an RN license.”</p>
Introduction to hands-on skills	<p>“I really enjoyed the hands-on experiences that were involved in camp in addition to going to different parts of the hospital.”</p> <p>“Learning and applying first aid skills and talking about how the hospital would then go on to treat the patient.”</p> <p>“I loved running a simulation code. It felt like I was in the middle of the action.”</p>

Many alumni respondents reported intention to pursue nursing as a career prior to attending nurse camp. In their survey responses, they stated the exposure to nursing via job shadowing, hands-on skills and hearing nurses' stories during camp further solidified this desire. One alumni respondent stated "[they] already knew [they] wanted to go into nursing, but nurse camp was a good motivator to stick with that decision after experiencing the work [they] would be able to do someday." Similarly, another respondent stated that "nurse camp really reinforced [their] desire to be a nurse. It got [them] very excited to become a nurse in the near future and pushed [them] to reach their goals and accomplish what is necessary to be a nurse." Memorable experiences at nurse camp thus reaffirmed many alumni desires to pursue nursing as a career.

Alumni were also asked additional Likert scale items to assess program influence. One item asked respondents to rate the following statement from strongly disagree to strongly agree: 'nurse camp influenced my view of nursing as a career in a positive way.' On the 5 point Likert scale, the mean score for this item was 4.52 out of 5 total. As a whole, the alumni respondents agreed quite strongly with this statement. This score is additionally supported by respondent reports of their views of nursing as a career changing in a positive way. One respondent even reported that "[they] wanted to be a surgeon before nurse camp. Nurse camp showed [them] that [they] are more passionate about patient interaction than surgery and so [they] chose to pursue nursing instead."

Another Likert scale item asked respondents to rate the statement 'nurse camp better helped me to understand what nurses do.' For this item, the mean score for all respondents was 4.67 out of 5, signifying strong agreement with this statement from the group as a whole. One alumni even reported they "did not have any family members in the healthcare field... nurse camp allowed [them] to better understand the scope of an RN." Several respondents expressed

similar sentiments that nurse camp helped them better understand what nurses do, particularly those who are first generation students and have no immediate or extended family in healthcare.

Conversely, a few respondents reported that their experience at nurse camp had the opposite effect by influencing them toward another career entirely. Some students attended nurse camp to better understand nursing as a career, but through their experience gained further clarity regarding their career path and decided that nursing was not the career for them. Despite their decision not to pursue nursing, these respondents all affirmed that their experience at nurse camp was still valuable. One respondent expressed this new clarity stating “I think nurse camp, while an amazing experience, just didn’t quite click for me and my interests... It sparked a couple of potential interests... that I would not have known before nurse camp, and strengthened my desire to help people in any way I can.” Another alumni respondent reported a similar epiphany while attending nurse camp, stating “for me it was a personal decision not to become a nurse... nurse camp showed me other ways I could still help people, but not in the hospital setting.” Given the main goal of introducing and recruiting underrepresented students into nursing and healthcare, influencing students away from nursing or healthcare is obviously not the intention of camp; however, this can still be considered a beneficial outcome to provide career clarity for students before they commit time and finances to pursuing a career that is not deemed ‘right for them.’

Barriers to Careers in Nursing and Healthcare

Several survey items targeted assessing barriers to pursuing nursing and allied health careers for underrepresented students. Respondents were asked a short answer question regarding barriers to these careers as well as two Likert scaled items regarding financial feasibility of pursuing secondary education and BIPOC representation in the profession. Emergent themes regarding barriers to pursuing nursing and allied health careers include challenges in navigating

application requirements for higher education, financial barriers to higher education and COVID changing the landscape of nursing education. Salient quotes highlighting the themes regarding barriers to pursuing nursing as a career are displayed in Table 3.

Table 3

What challenges or barriers have you faced while considering a career in nursing or allied health?

Challenging application process	<p>“Applying to nursing school was a challenge.”</p> <p>“Some challenges are getting accepted into a nursing program even as a competitive applicant.”</p> <p>“My biggest challenge right now is figuring out where and how I am going to finish my BSN.”</p>
Financial barriers to higher education	<p>“I am passionate about nursing and healthcare. [I bartend] to get oney to help pay for books and... scrubs, shoes, equipment etc.”</p> <p>“I struggled a bit financially, but was able to find some scholarships.”</p> <p>“The challenges I face are mostly financial.”</p>
COVID changing nursing education	<p>“COVID has been the biggest challenge by far. I came in when we were at our peak and it’s very interesting to see the differences from before [COVID] to now.”</p> <p>“COVID began part way through my first year of nursing school and shifted the entire program. This made everything from getting education and clinical hours to taking the NCLEX difficult.”</p> <p>“With COVID, classes became online and and it made it hard for me to learn.”</p>

Despite reported challenges in the application process for higher education, one respondent stated that “having the opportunity to put nurse camp on [their] applications to nursing school may have given [them] an edge” on the competition. Additionally, another alumni felt that nurse camp “allows you to see, without the commitment or financial burden, if healthcare could be for you.” Although themes regarding barriers to pursuing nursing included

challenges with college applications and financial constraints to higher education, alumni respondents did report that their experience in nurse camp addressed these barriers by providing relevant experience that sets them apart from other applicants. This allows students to experience careers in health care prior to committing time and finances to a career they may or may not find fulfilling.

Two 5 point Likert scaled items aimed to ask specifically about financial barriers and BIPOC underrepresentation in healthcare. An independent t-test was conducted to compare the difference in mean scores between non-Hispanic White alumni and BIPOC alumni for the statement 'I feel that pursuing a career in nursing or healthcare is financially achievable.' There was not a significant difference in mean Likert scores for non-Hispanic White alumni ($M=4.23$, $SD=0.802$) and BIPOC alumni ($M=3.89$, $SD=1.049$) conditions; $t(1.851)$, $p=0.067$. These results suggest that perceptions about the affordability of higher education do not differ depending on race/ethnicity for program alumni. It is notable that the mean for all alumni respondents of this item ($M=4.08$) was the lowest mean score of all Likert scaled items suggesting that respondents lean more neutrally regarding financial achievability of pursuing nursing or healthcare careers.

The second Likert scale item asked about representation in healthcare. An independent t-test was also conducted to compare the difference in mean scores between non-Hispanic White alumni and BIPOC alumni for the statement 'I see other healthcare professionals who look like me succeeding in nursing or healthcare.' There was a significant difference in mean Likert scores of this item for non-Hispanic White alumni ($M=4.58$, $SD=0.823$) and BIPOC alumni ($M=3.93$, $SD=1.074$) conditions; $t(3.438)$, $p<0.001$. BIPOC alumni disagree more strongly that they see professionals from similar backgrounds succeeding in these professions, further supporting underrepresentation in healthcare.

Discussion

This program evaluation intended to gather data on the influence of Multicare's nurse camp in recruiting underrepresented students into nursing, while also gaining a greater understanding of self-efficacy development and barriers to the profession for these individuals. The data gathered shows that Multicare's nurse camp is a pipeline program effective at recruiting BIPOC students in their program and sparking underrepresented student interest in nursing and allied health careers.

Increasing Representation

In comparing survey respondent demographics to the demographics of all attendees at nurse camp from 2016-2020, there is a slightly higher percentage of BIPOC students that attended nurse camp than the percentage of BIPOC students that responded to the survey, 53.8% of attendees from 2016-2020 compared to only 47.7% of survey respondents respectively. BIPOC students make up the majority of attendees at nurse camp, showing that administrators make a concerted effort to provide exposure to the profession to these students. Additionally, nurse camp is an experience that students can draw upon, strengthening college and job applications, which is particularly beneficial for students who may come from underprivileged backgrounds with difficult access to extracurricular activities and career coaching. Multicare's recruitment process for targeting BIPOC students to apply is effective and should be continued. This includes continuing presentations about nurse camp at local high schools with a high BIPOC student population and maintaining connections with key influencers in student career development, like school counselors and administrators.

With long term goals of increasing BIPOC representation in nursing, the survey data looks promising in that Multicare's nurse camp is influencing BIPOC students towards careers in

nursing and healthcare. Beyond simply recruiting a majority of BIPOC students into nurse camp, an overwhelming majority of BIPOC students who responded to the survey, 94.5% (n=52), intend to pursue a career in healthcare after their camp experience. This level of intent among nurse camp alumni is consistent with other successful pipeline programs outlined in literature, like Johns Hopkins' pipeline mentioned prior, in that over 80% of program alumni express intent to pursue careers in healthcare (Crews et al., 2020).

Lack of BIPOC representation in healthcare is a deterrent for students to pursue such careers.

There was a significant difference between non-White Hispanic and BIPOC alumni perception of representation in healthcare supporting that BIPOC alumni disagree that they see people who look like them succeeding in healthcare careers. Lack of representation sends a latent message that certain spaces are only meant for privileged, albeit predominately White, individuals and that BIPOC individuals are not supported or valued in certain arenas. During student experiences, representation or lack thereof, can either be an extrinsic motivator to continue a career path or a deterrent (Woods-Giscombe et al., 2020).

Influencing Future Careers

Nurse camp leaves a lasting impression on attendees even years after participation. With curriculum including direct exposure to nursing through job shadowing, skills training and simulation, alumni generated positive first-hand experiences influencing their career determination. Multicare's nurse camp curriculum is intentional in providing the most powerful experiences to cultivate self-efficacy. Alumni cultivated vicarious experiences through hearing patient care stories from practicing nurses, one of the more influential types of experiences that leads to increased self-efficacy (Bandura, 1977). Majority of the alumni respondents reported hands-on skills and job shadowing as the most influential experiences, showing rather than

telling camp participants what the nursing profession entails. With consideration of Bandura's theory of self-efficacy (1977), these kinds of hands-on experiences are the most powerful influence to developing self-efficacy to cultivate motivation and confidence to pursue a certain goal, in this case a career in nursing.

Not only do the majority of alumni respondents report intending to pursue nursing or an allied health career, but over half, 54.6% (n=60), of respondents have taken measures for this intention to come to fruition. Nurse camp alumni acting on their intention to pursue nursing after their nurse camp experiences demonstrates heightened self-efficacy to carry out this goal after their positive experience at camp. Although the goal of nurse camp is to influence youth toward careers in nursing, for alumni who decided not to pursue nursing after their camp experience, this is not considered a failure of the program. The respondents who reported that nurse camp influenced them toward a different career recalled positive camp experiences, but through nurse camp they gained career clarity resulting in pursuing a career that would be a better fit for these individuals. All of these individuals who reported choosing a career other than nursing reported interest in a healthcare adjacent field, like therapies, public health and emergency services. In this sense, nurse camp not only influences attendees towards nursing, but introduces allied health careers as potential options for students to pursue.

A minority of students have attained nursing licensure and/or current employment in nursing or healthcare. This is due to most alumni having recently graduated high school resulting in the majority of respondents being in their late teens to early twenties. It is likely that sufficient time has not passed for alumni to achieve these milestones given the amount of time it takes for licensure or gaining qualifications for employment in healthcare. An overwhelming majority of alumni respondents are 22 years of age or younger [see Table 4].

Table 4
Frequency of Survey Respondent Age in Years

Age in years	Frequency	Percent
16	1	1.0%
17	3	2.7%
18	9	8.1%
19	12	10.8%
20	26	23.4%
21	26	23.4%
22	24	21.6%
23	10	9.0%

Given most individuals graduate university at 21 or 22, most respondents have likely not yet completed a program allowing for licensure. Most respondents confirming a current nursing license or employment report being a CNA, which considering respondent age would be attainable. CNA licensure requires individuals to be 18 years of age and takes 6-12 weeks of courses. Licensure can be obtained in as little as 4 weeks with additional time to allow for individuals to pass examination. LPN licensure can be obtained in 12 months and RN licensure in 2 years at the associates level, 4 years at the bachelors level. Recommendations for longitudinal analysis of nurse camp alumni licensure and employment will be discussed further in study implications.

Breaking Barriers

Alumni respondents reported challenging application processes, financial constraints and COVID-19 as the main barriers to pursuing careers in nursing and allied health. In considering social determinants of health and existing inequities, students from marginalized populations face greater social and financial barriers to higher education. Multicare's nurse camp makes a concerted effort to address these barriers through providing guidance sessions regarding college

applications and financing. They have even hosted admissions counselors from surrounding colleges to discuss admissions requirements and provide tips on strengthening college applications. Despite these interventions, alumni still report challenging application processes and financial constraints in affording college. One addition that may further address these barriers could be hosting a panel of practicing nurses who identify as BIPOC, first generation or who had challenges with financing college to discuss their path to nursing, offering wisdom from someone who has achieved this goal with whom students identify.

For students from low socioeconomic backgrounds, challenges affording post-secondary education can certainly be a barrier to entry. In spite of this barrier to entry, careers in nursing and healthcare can provide economically disadvantaged students with job security, stable income and professional development/mobility (Woods-Giscombe et al., 2020). Nurse camp allows marginalized students to experience the role of nursing, while also presenting the career as a logical, financially beneficial and secure choice. Attaining a career in nursing that is stable with livable income can change the trajectory for an individual, their family and address economic inequities for marginalized populations. One barrier to healthcare professions for BIPOC individuals that were of particular interest for stakeholders were financial constraints to affording higher education. Given there was no significant mean difference between perceptions of financial achievability of higher education when comparing results of non-Hispanic White and BIPOC alumni, all alumni may feel similarly about the challenges of financial achievability, though specific conclusion as to why there is no difference observed among these two populations cannot be drawn. Either there is no difference between non-Hispanic White and BIPOC perceptions of financial achievability of higher education or the sample size is not representative or large enough to observe such a difference. Higher education is becoming more

unaffordable by the year particularly with increasing student loan borrowing and interest. This may be felt across all communities; however, it is well understood that BIPOC communities do not have the benefit of generational wealth that aids in attaining higher education and inequities in social determinants that inhibit such attainment (Toretsky et al., 2018).

Another barrier that alumni mentioned was the impact of the COVID-19 pandemic on education. Challenges presented by COVID-19 were reported to be changes in nursing education to mainly virtual formats and complicating everything from getting clinical hours to taking the NCLEX. While the pandemic is an unchangeable circumstance that has impacted society in many ways, nursing education is no exception. Many programs have transitioned to online courses to accommodate quarantine, stay at home orders and reduce disease transmission from in person contact. With nursing being a rigorous field with required hands-on skills training, beyond what alumni respondents have expressed, literature has documented student concern about what an interruption in their nursing education would mean for their future as Registered Nurses (DeWart et al., 2020). The COVID-19 pandemic has changed the delivery of nursing education. Many are drawn to nursing due to the academic rigor and hands-on role, reducing or transitioning hands-on training to modified formats have been a deterrent for some students, with nurse camp alumni as no exception (Michel et al., 2021). Multicare's nurse camp is well positioned to prepare students with anticipatory guidance to develop resilience, captivate interest with engaging activities and providing positive encouragement to endure the road to nursing. In a national, cross sectional study of undergraduate nursing students' perceptions on nursing education during the COVID-19 pandemic, results surprisingly showed that the pandemic actually strengthened student's desire to become nurses (Michel et al., 2021). Nurse camp should continue to acknowledge the impact of students' lived experience during the COVID-19

pandemic, its impact on nursing education and “continue reinforcing the essential contribution nurses make to the health of society” (Morin, 2020)

Limitations

Limitations to this study are sample size given the response rate of only 22.7%. While an adequate response rate, respondents who have positive outcomes after nurse camp attendance like college admission into nursing, employment or intention to continue towards nursing as a career, may be more inclined to respond to the survey than alumni who have chosen a different path. Given this potential bias, the responses may not be generalizable to all nurse camp alumni. Another limitation is that given self-efficacy is influenced by multiple factors throughout one's life, the extent to which nurse camp influences alumni self-efficacy cannot be determined at this time. Only general conclusions can be drawn about the influence of nurse camp on self-efficacy, however, to what degree we are uncertain.

Implications for Future Practice

Pipeline programs have existed in the United States for decades; however, many programs have not documented their efficacy and impact in influencing students toward nursing and allied health careers. This study adds to the literature to better understand the influence of these programs on underrepresented students and their role in self-efficacy and career development. Immediate use of this study's findings are to provide guidance for quality improvement of Multicare's nurse camp.

Other practical implications of this study is data to support program expansion to provide more job shadowing, hands-on skills training and simulation for camp participants, as alumni agree this was the most influential aspect of their camp experience. This would likely require increased program financing, increasing volunteer manpower, lengthening the program duration

or potentially offering extended job shadowing opportunities for interested students. An additional consideration would be to expand the program availability or develop a modified program to reach students at a younger age, potentially even elementary or middle school, in which research shows career development begins. Lastly, incorporating sessions to address barriers reported by alumni respondents, specifically navigating college applications and finances, is highly recommended for program improvement. There are plans to disseminate these findings to Multicare leadership to support and advocate for future program expansion and investment.

Larger implications of this project are to provide further information on the characteristics of pipeline programs given program curriculum can vary. Additionally, this study hopes to present pipeline programs as one potential solution to the nursing shortage and gap in BIPOC representation. By increasing BIPOC recruitment into nursing and addressing underrepresentation in the field, the aim is for the nursing workforce to, at minimum, reflect the diversity in the general population, thus reducing health disparities, and improving equity, access and quality care for communities of color.

Conclusions

Multicare's nurse camp is influential to underrepresented high school students supported by majority of respondents' intention to pursue careers in nursing and healthcare after camp participation. Nurse camp is also effective at recruiting BIPOC students and current recruitment efforts should continue to provide the opportunity for underrepresented student participation. This study further supports current themes in pipeline program literature; that programs have a positive influence on career pursuit, an important role in changing perceptions of nursing as a

profession and are dedicated to introducing underrepresented students to careers they may have previously believed were not attainable.

Recommendations for further research are to conduct longitudinal studies on nurse camp participants to follow alumni career paths over time to more comprehensively assess program impact. Additionally, conducting pre and post surveys to measure self-efficacy scores prior to camp and after completing camp would provide better insight into nurse camp's direct influence on self-efficacy.

As of 2021, Multicare's nurse camp has transitioned to Multicare Academy for Students in Healthcare (M.A.S.H. camp), which expands the program to include additional exposure to allied health professions such as laboratory services, human resources, information technology and therapies. The evolution of nurse camp into M.A.S.H. camp is supported by a handful of respondents reporting interest in allied health careers and is a change likely to interest an even wider variety of underrepresented students.

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Appendix A

Hello Multicare Nurse Camp Alumni,

Multicare and Seattle University have partnered to conduct a survey on nurse camp alumni to gather long term data on the number of alumni pursuing careers in nursing or health care, the influence of nurse camp on increasing diversity and minority student interest in nursing as a career and barriers for diverse populations in pursuing these careers.

You are being contacted as records show you have previously attended Multicare's summer high school nurse camp between the summers of 2016-2020 and your input is invaluable in learning how nurse camp can better inspire and prepare minority and first generation students for careers in health care.

Sharing your experience about nurse camp and beyond through our survey would be greatly appreciated and impact the future of nurse camp for students to come. Participation in this survey is voluntary and should take roughly 10 minutes. Questions in this survey can be skipped and you can stop at any time.

We are grateful for your time and consideration in participating in this survey. If there are any questions or concerns, please don't hesitate to contact the principal investigator at the contact information found at the end of this email. Responses will be accepted until March 6th at 11:59PM.

Follow this link to the Survey:

`{1://SurveyLink?d=Take the Survey}`

Or copy and paste the URL below into your internet browser:

`{1://SurveyURL}`

Follow the link to opt out of future emails:

`{1://OptOutLink?d=Click here to unsubscribe}`

Your confidentiality will be maintained when utilizing all data. Completion of this survey serves as consent to use your responses anonymously.

The principal investigator can be contacted anytime at the information below:

McKenzie Golden, RN

Seattle University | DNP-FNP III Student

goldenmckenz@seattleu.edu

Appendix B



Demographics

Name (First name, Last name)

What month and year were you born? (mm/yyyy)

Gender Orientation

- Male
- Female
- Non-binary
- Transgender
- Prefer not to say

Are you of Hispanic, Latino or Spanish origin?

- Yes
- No

How would you describe yourself? (Multiple answers allowed)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Pacific Islander
- White
- Other (please specify)

Are you a First Generation student?

- Yes
- No

Do you speak any languages other than English at home? (If yes, what language?)

- No
- Yes (please specify)

What high school did you graduate from?

What year did you graduate high school?

What year(s) did you participate in Multicare's nurse camp?

- 2016
- 2017
- 2018
- 2019
- 2020

Current employment/schooling

Are you currently enrolled in a post-high school healthcare related program? (if yes, what program)

- No
- Yes

Do you intend to pursue a career in nursing or health care? (if yes, what career?)

- No
- Yes (please specify)

Do you currently hold a nursing related license (CNA, LPN, RN)? (if yes, what license?)

- No
- Yes (please specify)

Do you currently work in a health care related field? (if yes, what is your job?)

No
 Yes (please specify)

Self-efficacy scale

On a scale of strongly disagree to strongly agree, please rate the following statements considering how nurse camp influenced the items below...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Nurse camp influenced my view of nursing as a career in a positive way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that pursuing nursing or a career in healthcare is financially achievable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse camp helped me better understand what nurses do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see other professionals who looked like me succeeding in nursing or healthcare	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I will be able to achieve most of the goals that I set for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When facing difficult tasks, I am certain that I will accomplish them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I think that I can obtain outcomes that are important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe I can succeed at most any endeavor to which I set my mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I will be able to successfully overcome many challenges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can perform effectively on many different tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to other people, I can do most tasks very well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when things are tough, I can perform quite well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Short answer

What specifically about nurse camp influenced your decision to choose nursing, another career in health care or a different career entirely?

What barriers or challenges have you encountered in pursuing a career in nursing or healthcare?

What experiences at nurse camp helped you the most in pursuing a career in healthcare or other career plans after high school?

What educational experiences should nurse camp include to better prepare students for a future in healthcare?

Appendix C

Item 1: I will be able to achieve most of the goals that I set for myself

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 2: When facing difficult tasks, I am certain that I will accomplish them

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 3: In general, I think that I can obtain outcomes that are important to me

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 4: I believe I can succeed at most any endeavor to which I set my mind

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 5: I will be able to successfully overcome many challenges

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 6: I am confident that I can perform effectively on many different tasks

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 7: Compared to other people, I can do most tasks very well

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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Item 8: Even when things are tough, I can perform quite well

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly disagree
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